



Wholesale Renewable Energy Power Purchase Agreements



BART Board of Directors
December 7, 2017



District Energy Facts

- District uses about 400,000 MWh every year, slightly more than the City of Alameda, making it one of the largest users in Northern CA.
- District electricity costs are about \$41 million per year.
- Electricity is the 2nd largest cost after labor.
- Currently about 4% of the District's electricity portfolio comes from renewable energy. With the execution of these PPAs, about 90% of the portfolio will come from renewable energy in 2021 and about 75% beginning in 2025, as the District's load increases.



Timeline of Renewable Energy Procurement

Aug
2015

April
2017

May
2017

June –
Aug
2017

Aug –
Nov
2017

Dec
2017

2018 –
2020

Jan
2021

CA Senate
Bill 502
authorizes
BART to
procure
renewable
energy

BART Board
approves
Sustainability
Policy and
Wholesale
Electricity
Portfolio
Plan

Staff
launches
RFP for
Wholesale
Renewable
Electricity

Review
and
shortlisting
of 50+
renewable
projects

Contract
negotiations
with two
developers

Board
approval
required
for
signing
contracts

Project
Construction

Renewable
energy
delivery
begins



Wholesale Electricity Portfolio Policy: Performance Measures

1. Maintain a long-term cost advantage compared to rates that BART would otherwise pay as a bundled utility customer; and
2. Maintain per unit energy costs within BART's Short Range Transit Plan (SRTP) projections; and
3. Achieve a portfolio that:
 - Has an average emission factor no greater than 100 lbs-CO₂e/MWh during the period 2017 through 2024 (inclusive).
 - Is from at least 50% Eligible Renewable sources and from at least 90% low and zero carbon sources by 2025.
 - Is 100% from zero carbon sources by 2035.
 - Is 100% from Eligible Renewable sources by 2045.



Renewable RFP Objectives

- Align procurement with Board Policy.
- Purchase long-term (10-30 year) renewable supply at stable, competitive prices.
- Ensure developers are experienced and creditworthy, and contracts mitigate BART's exposure to market, development and production risks.
- Ensure projects are realistic and far along in preconstruction planning.
- Ensure BART's risks during delivery terms are minimized.

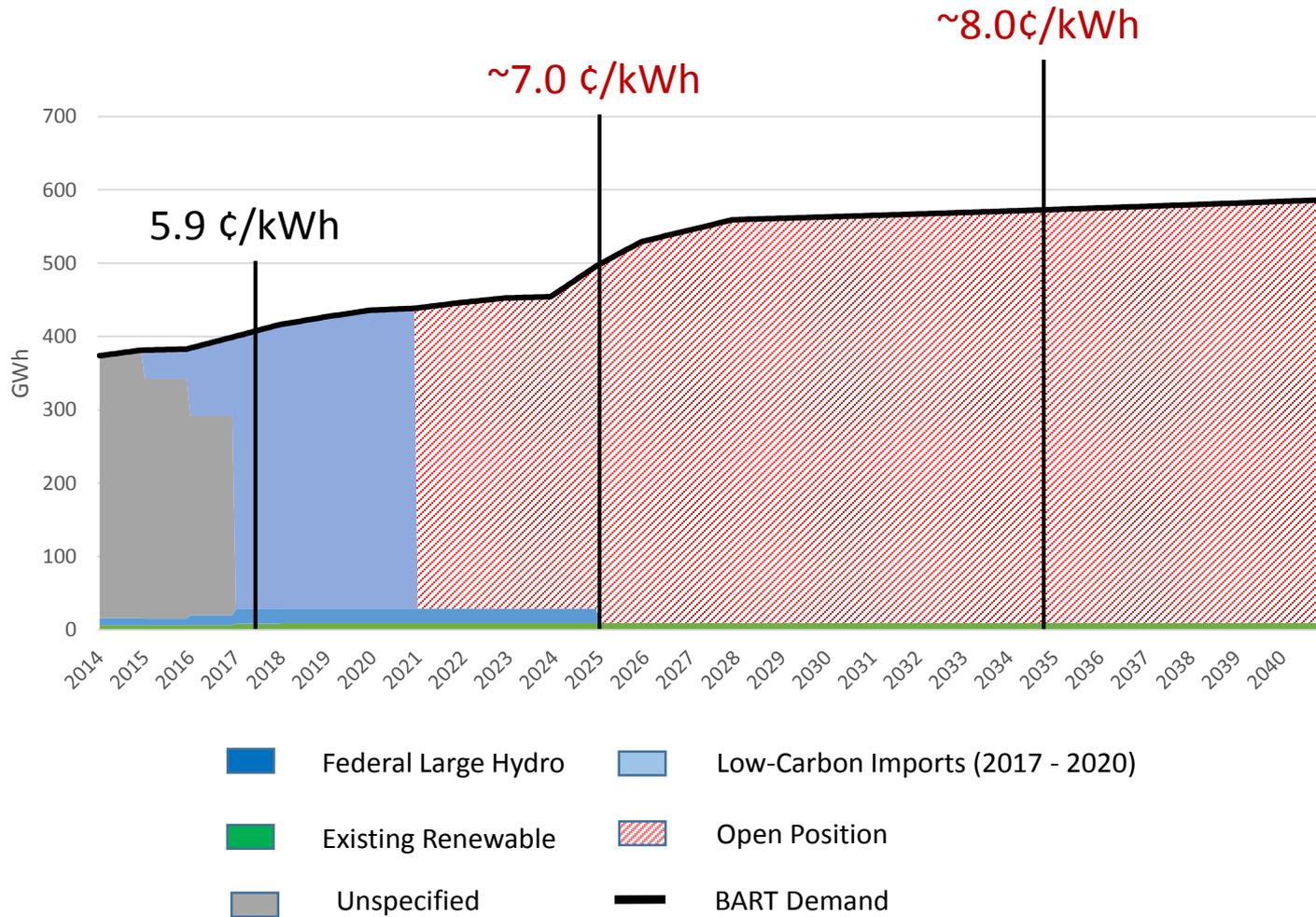


Renewable Energy Contract Details

Developer	NextEra Energy	Recurrent Energy
Project Name	Sky River	Gaskell West 2
Technology	Wind Energy	Solar Energy
Location	Kern County (East of Bakersfield)	Kern County (Southeast of Bakersfield)
Term	1/1/2021 – 12/31/2040	1/1/2021 – 12/31/2040
Project Size	61.7 MW	45 MW
Expected Output	257,000 MWh/Year	142,000 MWh/Year



BART Energy Supply without Renewable Contracts





BART Energy Supply with Renewable Contracts

